

UTILITY PATENT APPLICATION TRANSMITTAL

MAIL STOP PATENT APPLICATION
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

Customer No. 23696
Attorney D cket No.: 030107
Date: November 21, 2003
Express Mail Label No.: EV339075365US

Dear Sir:

Transmitted herewith for filing is the patent application of:

Inventor(s): Deirdre O'Shea, Ryan Milne
 For: METHOD TO EFFICIENTLY GENERATE THE ROW AND COLUMN INDEX FOR HALF-RATE INTERLEAVER IN GSM

Enclosed are:

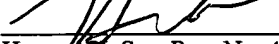
1. Patent application (21) total pages.
2. Drawings: Formal (6) sheet(s) or Informal () sheet(s).
3. Declaration/Power of Attorney: Signed Unsigned
4. This application claims priority from Application Serial No. , Filed , Status .
5. An Assignment () pages and Recordation Form Cover Sheet.
6. A Preliminary Amendment () pages.
7. Information Disclosure Statement (IDS):
 - a. PTO-1449
 - b. Copies of IDS Citations (number of citations:)
8. Other:

CLAIMS:	(a) Filed	(b) Extra Claims	Large Entity Fee	Fee Paid
Total*	27 - 20	7	x \$18 =	\$126.00
Independent**	3 - 3	0	x \$86 =	\$0
Multiple Dependent Claim(s): <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			\$290	\$0
APPLICATION FILING FEE			\$770	\$770.00
			TOTAL FEE	\$896.00

*If the number in column a is less than 20, enter 0 in column b.
 **If the number in column b is less than 3, enter 0 in column b.

9. A check in the amount of \$_____ is enclosed to pay the filing fee.
10. Please charge Deposit Account No. 17-0026 of QUALCOMM Incorporated the amount of \$896.00. The Commissioner is hereby authorized to charge payment of any additional fees which may be required, or credit any overpayment, to said Deposit Account No. 17-0026. A duplicate of this sheet is enclosed for fee processing.
11. The Commissioner is further hereby authorized to charge to said Deposit Account No. 17-0026, pursuant to 37 CFR 1.25(b), any fee whatsoever which may become properly due or payable, as set forth in 37 CFR 1.16 to 37 CFR 1.18 inclusive, for the entire pendency of this application without specific additional authorization.

Date: November 21, 2003

Signature: 
 Howard H. Seo, Reg. No. 43,106
 Phone No. 858-845-5235

CORRESPONDENCE ADDRESS

Send correspondence to Customer No. 23696 at the following address:
 QUALCOMM Incorporated
 Attn: Patent Department
 5775 Morehouse Drive
 San Diego, California 92121-1714
 Telephone: (858) 658-5787
 Facsimile: (858) 658-2502